Product Data Sheet

Actuator
01NS80M

01NS80M is a powerful actuator up to 8000N thrust, integrated with control unit and power supply in the housing. In addition to its own actuator, 01NS80M can connect up to additional 2 actuators and become a 3-motor driving system. 01NS80M is quiet and water-proof which is designed for use in a variety of medical and home care applications such as patient hoist, hospital bed, nursing bed…etc.

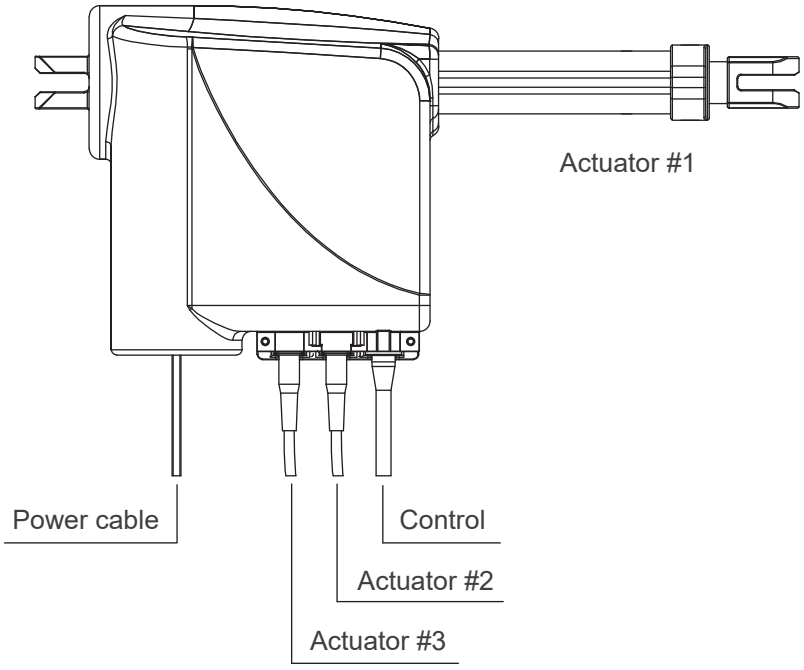
Features

- Main applications: Homecare, medical
- Max. load: 8000N (push) / 6000N (pull)
- Stroke: 50 ~ 400 mm
- Preset limit switches
- Steel extension tube
- Input voltage: 230V AC 50Hz / 110V AC 60Hz
- Power supply: 24V/8A Toroidal transformer
- Output voltage: 24V DC
- Max. number of controls: 1 channel
- Max. number of additional actuators: 2 channels (except for own actuator)
- Max. current: 6A per channel
- Protection class: Class I
- Noise level: ≦53dB
- IP Protection level: IPX4 (static, non-action)
- Color: Light gray RAL 7035
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Ambient operation temperature: +5°C ~ +40°C
- Certified: CE Marking, EN 60601-1-2, IEC 61000-3-2, IEC 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11

Option

- Mechanical push only extension tube
- Safety nut (in push direction)
- IPX5 protection level (static, non-action)

I/O Introduction



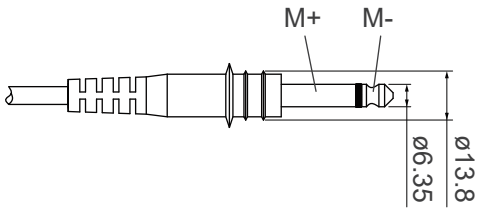
Compatibility

Product	Model	MD80M spec
Actuator	01NS80, 01NS82, 01NS60, 01KS60	- Without positioning feedback sensors - With J1-type Ø6.35 Phone jack
Control	HF, H3F, HT, H3T, FS1, FS2, HS12	- P1 control category - With H-type 5-pin or 8-pin DIN plug

Socket

- **Actuator socket**

  - J1-type

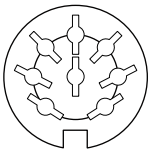


J1-type

Remarks:
Connect (M+) to '+' & (M-) to '-' of DC power, the actuator will extend.

- **Control socket**

  - H-type DIN plug

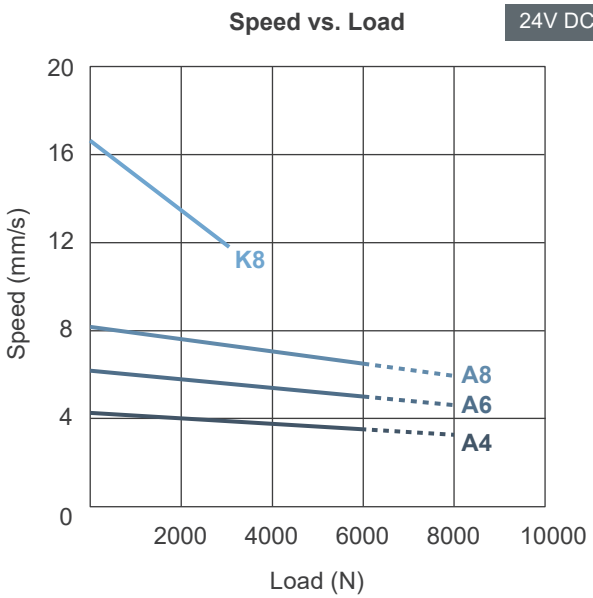


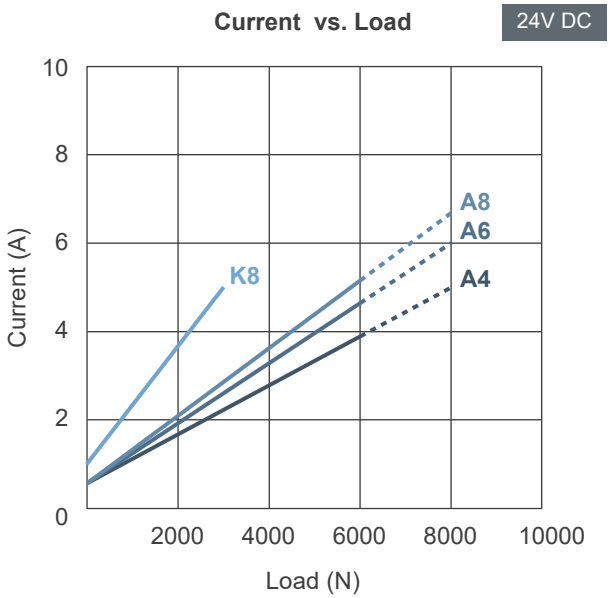
8-pin socket

H-type

Performance Data

Model No.	Push Max. (N)	Pull Max. (N)	*Typical speed (mm/s)		*Typical current (A)	
			No load	Full load	No load	Full load
01NS80M-XX**A4**-XXX.XXX	8000	6000	4.2	3.3	0.6	5.0
01NS80M-XX**A6**-XXX.XXX	8000	6000	6.2	4.6	0.6	6.0
01NS80M-XX**A8**-XXX.XXX	8000	6000	8.1	5.9	0.6	6.7
01NS80M-XX**K8**-XXX.XXX	3000	3000	16.6	11.8	1.0	5.0





Push / Pull Load ——— Push Load - - -

Remarks:

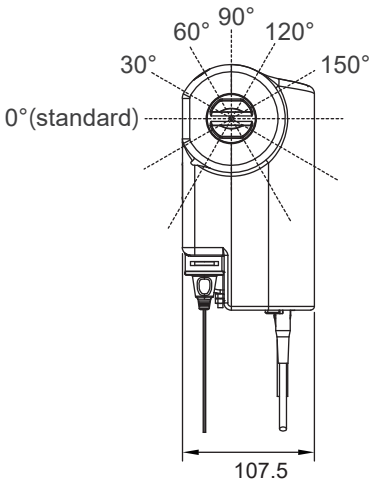
* The typical speed or typical current means the average value neither upper limit nor lower limit. The performance curves are made with typical values.

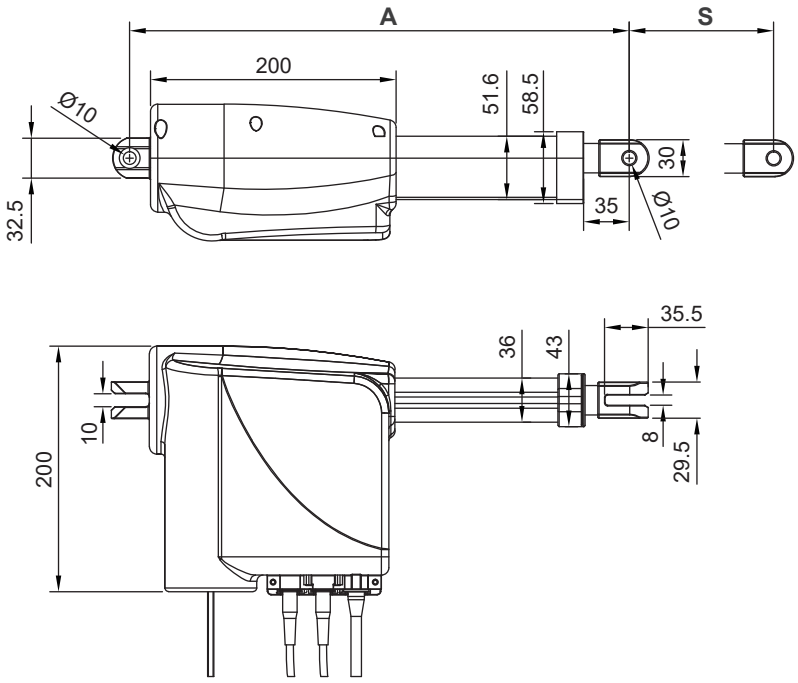
Dimensions

Stroke(S)	50≦S≦300mm		
Retracted length (A)	Front connector / Safety option	7	8
	No safety option	A≧S+180mm	A≧S+210mm
	With Safety Nut (SN)	A≧S+185mm	A≧S+215mm

• 301≦S≦400mm, retracted length (A) + 30mm • Tolerance: ±3mm
• S≧401mm, Please consult sales representative for feasibility and the available retracted length.

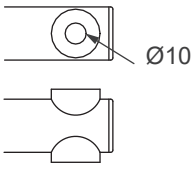
Pivot orientation of Rear connector



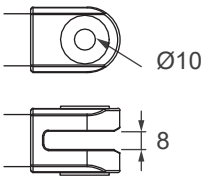


- **Front Connector**

7: Plastic bushing

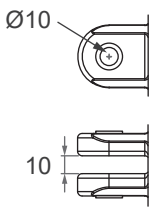


8: Zinc alloy clevis with plastic bushing



- **Rear Connector**

1: Zinc alloy clevis



Ordering Key

01NS80M - 2 2 A6 - 420 . 620 - 8 1 - A 0 G 4 1

Input voltage	**2**: 230V AC **1**: 120V AC
Additional actuator port	**0**: None **1**: 1 port **2**: 2 ports
Motor and Spindle type	**A4**: 2500 rpm / 4mm pitch **A6**: 2500 rpm / 6mm pitch **A8**: 2500 rpm / 8mm pitch **K8**: 2500 rpm / 8mm pitch (Refer to Performance Data)
Retracted length	**XXX** (Refer to Dimensions)
Extended length	**XXX** (Refer to Dimensions)
Front connector type	**8**: Zinc alloy clevis with plastic bushing (standard) **7**: Plastic bushing (Refer to Dimensions)
Pivot orientation of Rear connector	Zinc alloy clevis with following orientation options **1**: 0° (standard) **3**: 30° **6**: 60° **9**: 90° **C**: 120° **F**: 150°
Option	**0**: None **P**: Push only **S**: Safety nut **A**: Push only + Safety nut
Reserved	**0**: No meaning
Color	**G**: Light gray RAL 7035
IP Protection level (static, non-action)	**4**: IPX4 **5**: IPX5
Power cord length	**3**: 3000mm straight (standard) **4**: 4000mm straight